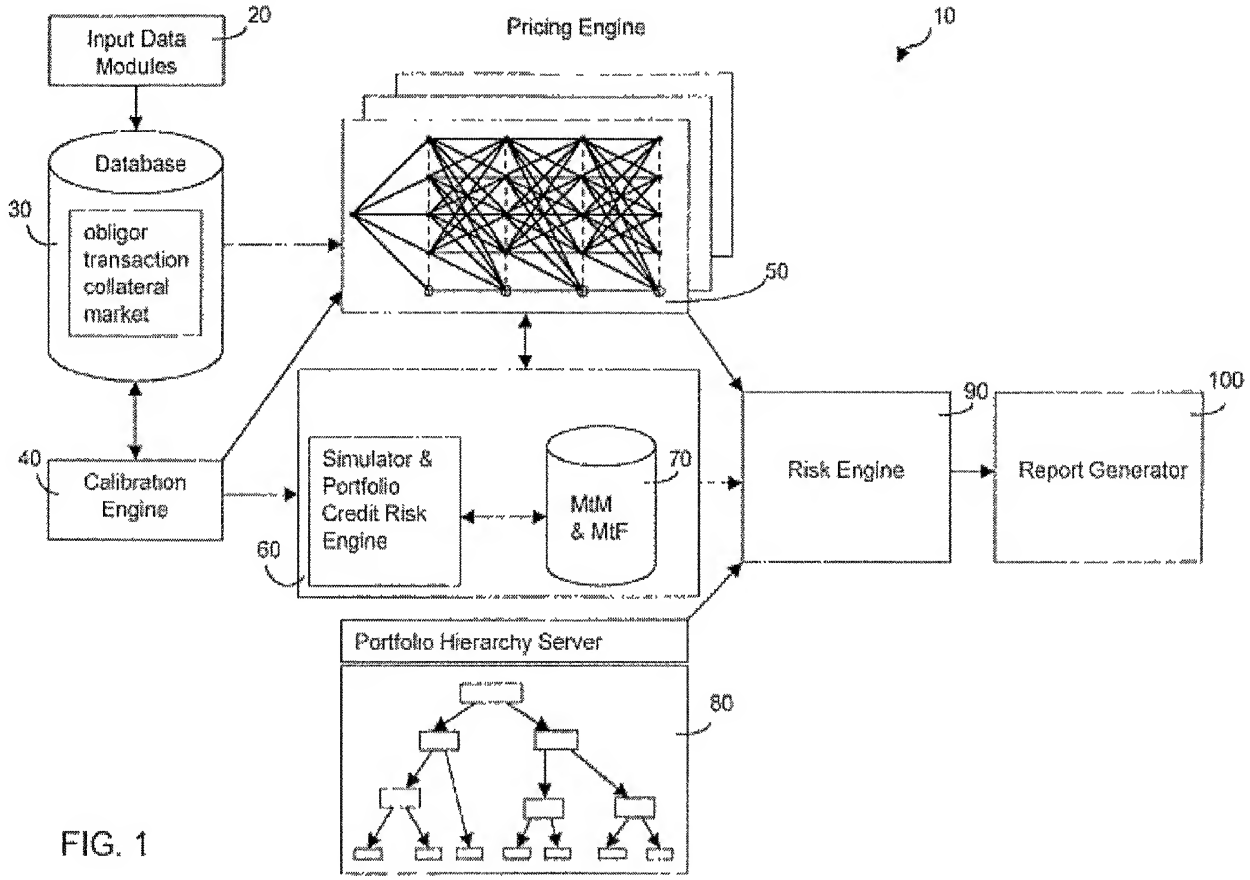
Input Data Modules
20
Pricing Engine
10
Database
30
obligor
transaction
collateral
market
50
40
Calibration Engine
Simulator & Portfolio Credit Risk Engine
60
MtM & MtF
70
Risk Engine
90
Report Generator
100
Portfolio Hierarchy Server
80

FIG. 1

SCOTT TECHNOLOGY

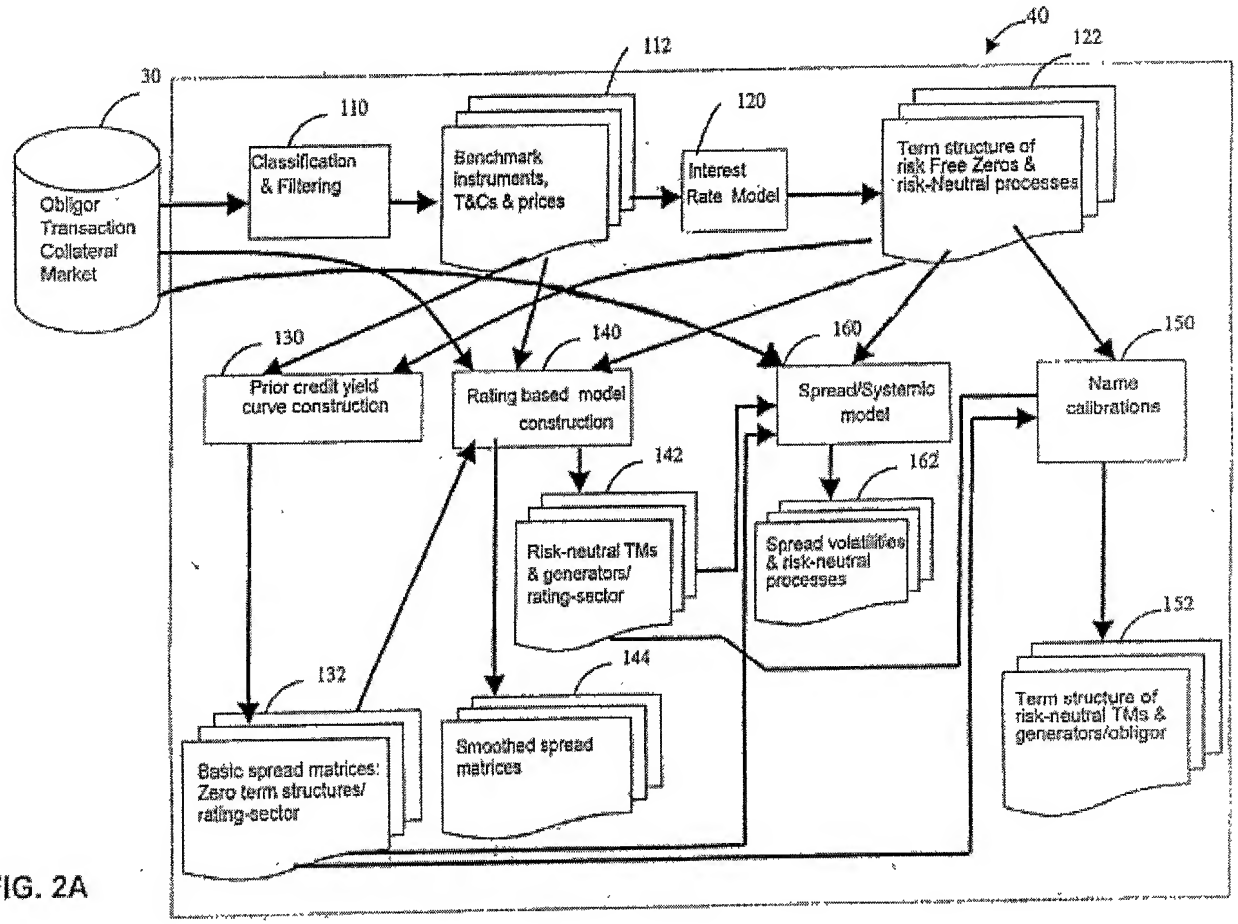

FIG. 2A

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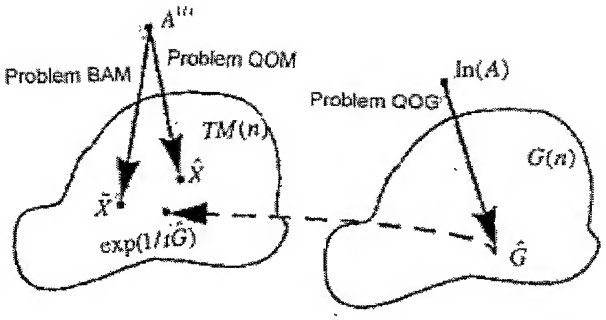


FIG. 2B

20070726v1.00

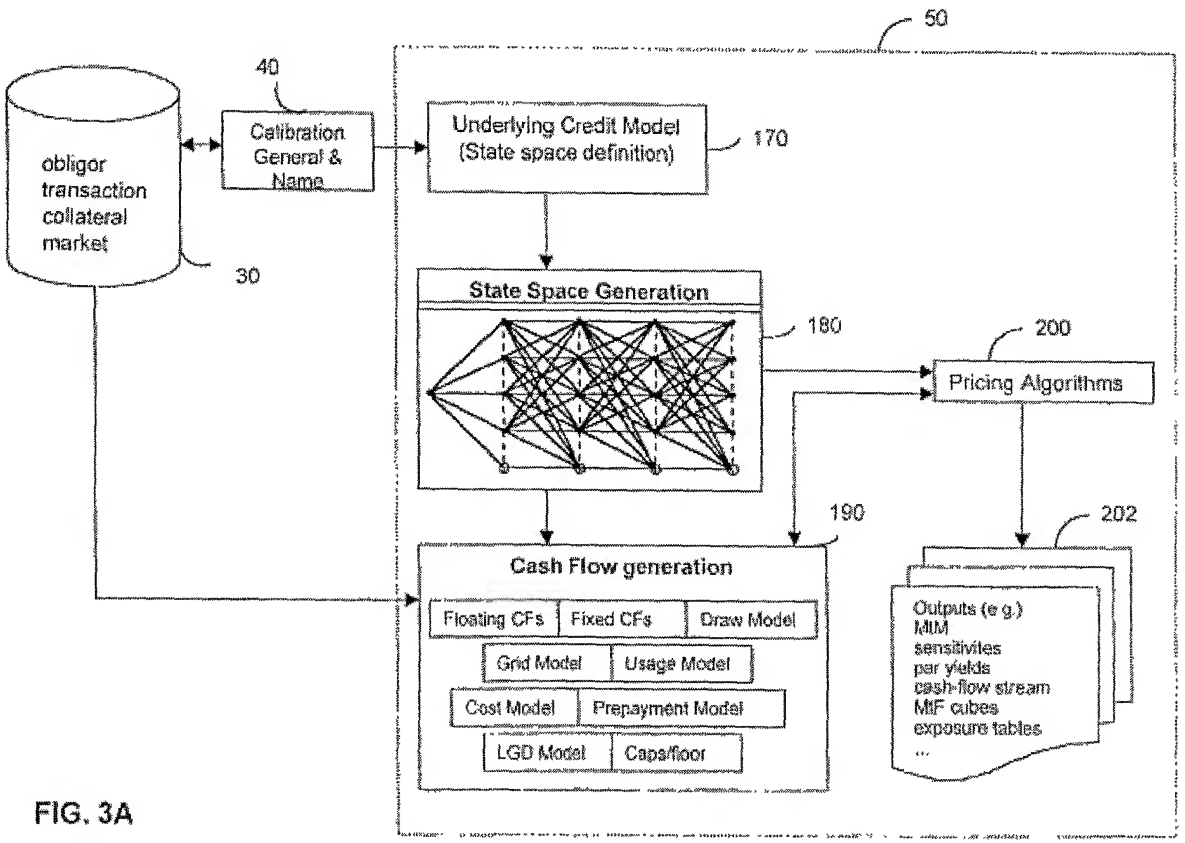
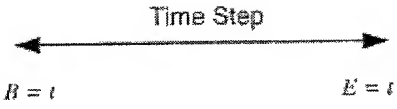


FIG. 3A



Cash flows in advance

If borrower prepays

Principal outstanding (AC)

Prepayment fee (CF_{PP})

Otherwise

Interest (CF_I)

Principal amortization (CF_P)

Cash flows in arrears

If borrower prepays

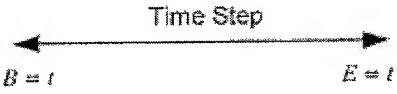
0

Otherwise

Interest (CF_I)

Principal amortization (CF_P)

FIG. 3B



Cash flows in advance

Upfront fee
(only if t=0) (CF_{UF})

If borrower prepays

Term Loan Outstanding (OS_{TL})

Prepayment fee (CF_{PP})

Otherwise

Facility fee (CF_{FF})

LC fee (CF_{LC})

BA fee (CF_{BA})

(Operating costs) ($-CF_C$)

(Revolver draw) ($-OS_{RV}$)

Cash flows in arrears

If borrower prepays

0

Otherwise

Interest (CF_I)

Term loan

Amortization (CF_P)

Revolver draw

Repay (OS_{RV})

Commitment fee (CF_{CF})

Utilization fee (CF_{UT})

FIG. 3C

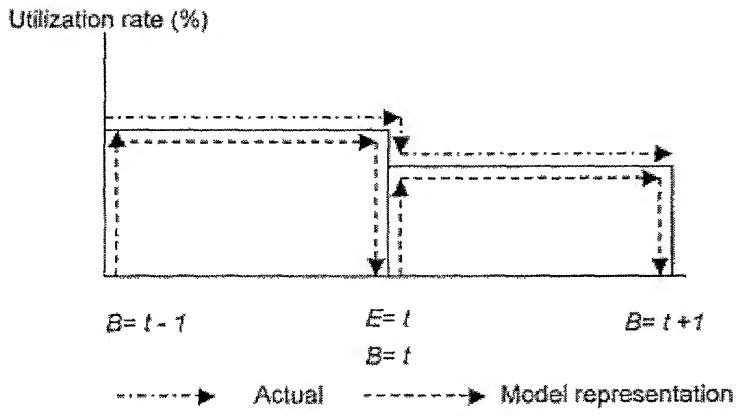

Utilization rate (%)
B= t - 1
E= t
B= t
B= t +1
Actual
Model representation

FIG. 3D

Case No. 1-CV-2010-00

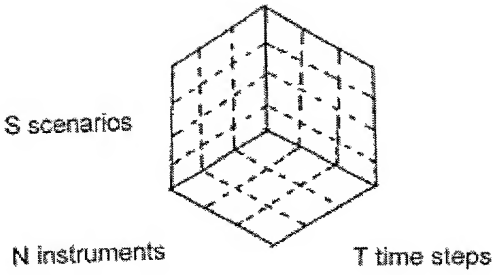


FIG. 4A

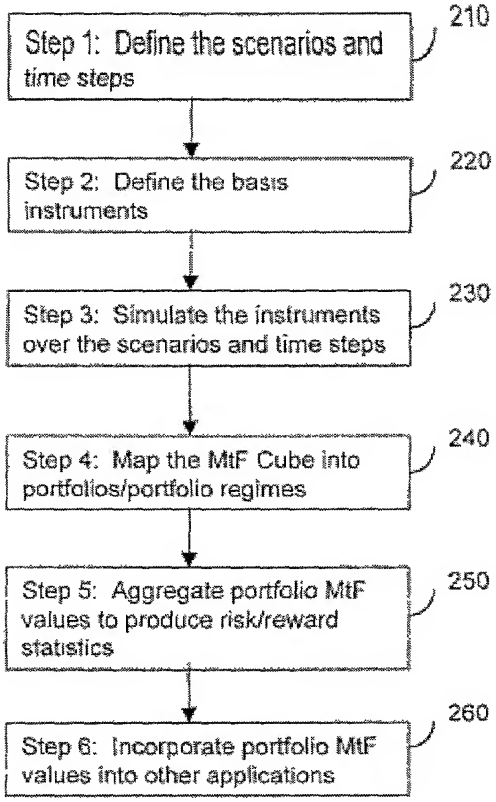

Step 1: Define the scenarios and time steps
210
Step 2: Define the basis instruments
220
Step 3: Simulate the instruments over the scenarios and time steps
230
Step 4: Map the MtF Cube into portfolios/portfolio regimes
240
Step 5: Aggregate portfolio MtF values to produce risk/reward statistics
250
Step 6: Incorporate portfolio MtF values into other applications
260

FIG. 4B